

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

10-122
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-30-78		MAY 19 1978	
Company Yates Petroleum Corp. ✓				Connection El Paso Natural Gas Company					
Pool Kennedy Farms				Formation Morrow				Unit O.G.C. ARTESIA, OFFICE	
Completion Date 10-18-77		Total Depth 8925' KB		Plug Back TD 8805' KB		Elevation 3318' KB		Farm or Lease Name Blevins "IK" Com	
Csg. Size 4-1/2"	Wt. 11.6#	d 4.000	Set At 8877'	Perforations: From 8646 To 8660' KB			Well No. 1		
Tbg. Size 2-3/4"	Wt. 4.6#	d 1.995	Set At 8644	Perforations: From 8595 To 8597' KB			Unit Sec. Twp. Rge. D 35 17S 26E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8589' KB		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 143 @ 8650		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 8647	H 8647	Gg 0.618	% CO ₂ 0.39	% N ₂ 0.28	% H ₂ S Nil	Prover 4"	Meter Run Flange	Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow
SI							2910	54			months
1.	4.026 x 2.000			658	9	70	2733	70			1 hour
2.				660	16	70	2625	73			1 hour
3.				662	33	70	2393	76			1 hour
4.				665	72	70	1870	80			1 hour
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	19.81	77.72	671.2	.9905	1.286	1.0565	2072
2.		103.78	673.2	.9905	1.286	1.0566	2767
3.		149.27	675.2	.9905	1.286	1.0567	3980
4.		220.81	677.2	.9905	1.286	1.0568	5888
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	223.35 Mcf/bbl.
1.	.998	530	1.476	.8959	A.P.I. Gravity of Liquid Hydrocarbons	60.8 Deg.
2.	1.001	530	1.476	.8957	Specific Gravity Separator Gas	0.605 XXXXXXXXXX
3.	1.004	530	1.476	.8955	Specific Gravity Flowing Fluid	XXXXX 0.618
4.	1.007	530	1.476	.8953	Critical Pressure	672.5 P.S.I.A. 672 P.S.I.A.
5.					Critical Temperature	359 R 363 R

P _c 3640	P _c ² 13250	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0294$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6400$
NO.	P _t ²	P _w	P _w ²
1			11792
2			11028
3			9535
4			6721
5			

Absolute Open Flow		9656 Mcfd @ 15.025	Angle of Slope @ 55 degrees	Slope, n 0.6990
Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT. Calculations worksheet attached.				
Approved By Commission:	Conducted By:	Calculated By:	Checked By:	
	Bill Trembley, Jr.	Eddie M. Mahfood		